IN THE CLAIMS:

Please amend claims 1-3 and 5-12 as follows. Please add new claims 13-28.

1. (Currently Amended) A method, ~~of channel allocation in a cellular communication network wherein a radio channel is to be selected for establishment of a connection in an environment with potentially interfering signals, the method~~ comprising:

establishing a radio channel candidate;

processing the radio channel candidate with potentially interfering signals and calculating a carrier to interference ratio ~~(CIR)~~ for ~~the~~ a selected carrier frequency of the radio channel candidate and the potentially interfering signals;

calculating at least one dominant interference ratio ~~(DIR)~~ being the ratio of ~~the~~ a signal level of a strongest potentially interfering signal with respect to ~~the~~ a sum of signal levels of other potentially interfering signals; and

using a criteria based on the ~~at least one of the~~ dominant interference ratio ~~and the carrier to interference ratio~~ in a channel selection process for selecting a channel for the connection to be established.

2. (Currently Amended) A method according to claim ~~1~~14, wherein the radio channel candidate and potentially interfering signals are processed using an interference cancellation technique.

3. (Currently Amended) A method according to claim 2, wherein the dominant interference ratio is used to establish an indication as to ~~the~~ an interference cancellation gain provided by the interference cancellation technique, ~~that~~ the interference cancellation gain being used to establish a criteria for channel selection.

4. (Original) A method according to claim 3, wherein the interference cancellation gain is used to modify an estimate of the carrier to interference ratio before using the carrier to interference ratio as a basis for criteria in the channel selection process.

5. (Currently Amended) A method according to ~~any preceding~~ claim 1, wherein one of the criteria used in the channel selection process is ~~the~~ a maximum value of ~~the~~ a minimum difference between the calculated carrier to interference ratio and a target carrier to interference ratio.

6. (Currently Amended) A method according to ~~any preceding~~ claim 1, where one of the criteria used in the selection process is ~~the~~ an average dominant interference ratio taken over a set of n connections which could be interfered with by the connection to be established.

7. (Currently Amended) A method according to claim 3, wherein the interference cancellation gain provided by the interference cancellation technique is established from the dominant interference ratio using a predefined function.

8. (Currently Amended) ~~A system for channel allocation in a cellular communication network wherein a radio channel is to be selected for establishment of a connection in an environment with potentially interfering signals, the system~~ An apparatus, comprising:

an establishing unit configured to establish ~~means for establishing~~ a radio channel candidate;

a first calculation unit configured to process ~~means for processing~~ the radio channel candidate with potentially interfering signals and ~~calculating~~ to calculate a carrier to interference ratio ~~(CIR)~~ based on ~~the~~ a selected carrier frequency of the radio channel candidate and ~~the~~ potentially interfering signals; and

a second calculation unit configured to calculate ~~means for calculating~~ a dominant interference ratio ~~(DIR)~~ being ~~the~~ a ratio of ~~the~~ a signal level of a strongest potentially interfering signal with respect to a sum of the signal levels of ~~the~~ other potentially interfering signals;~~,~~ and ~~the system further comprising~~

a selection unit configured to ~~means for implementing a~~implement a selection process for selecting a channel for ~~the~~ a connection to be established using criteria based on the ~~at least one of the~~ dominant interference ratio ~~and the carrier to interference ratio~~.

9. (Currently Amended) ~~A system~~ An apparatus according to claim ~~8~~15, further comprising an interference cancellation unit configured to apply ~~which comprises means for applying~~ an interference cancellation technique to the radio channel candidate and potentially interfering signals.

10. (Currently Amended) ~~A system~~ An apparatus according to claim 9, further comprising an interference cancellation gain unit configured to use ~~which comprises means for using~~ the dominant interference ratio to establish an indication as to ~~the~~ a gain provided by the interference cancellation technique, ~~that~~ the gain being used to establish a criteria for channel selection.

11. (Currently Amended) ~~A~~ An apparatus according to claim 8 configured to operate as part of a base station controller ~~in a cellular communication network which includes a system according to claim 8, 9 or 10~~.

12. (Currently Amended) A ~~cellular communication network~~ system comprising a plurality of ~~base~~ stations, at least some of which comprise: ~~include a system according to claim 8~~.

an establishing unit configured to establish a radio channel candidate,

a first calculation unit configured to process the radio channel candidate with potentially interfering signals and to calculate a carrier to interference radio based

on a selected carrier frequency of the radio channel candidate and potentially interfering signals, and

a second calculation unit configured to calculate a dominant interference ratio being a ratio of a signal level of a strongest potentially interfering signal with respect to a sum of the signal levels of other potentially interfering signals; and

a selection unit configured to implement a selection process for selecting a channel for a connection to be established using criteria based on the dominant interference ratio.

13. (New) A system according to claim 12 comprising a cellular communication network.

14. (New) A method according to claim 1 wherein said using criteria based on the dominant interference ratio additionally uses the carrier to interference ratio.

15. (New) An apparatus according to claim 8 wherein said implementing unit uses criteria based the carrier to interference ratio.

16. (New) An apparatus comprising:

means for establishing a radio channel candidate;

means for processing the radio channel candidate with potentially interfering signals and calculating a carrier to interference ratio based on a selected carrier frequency of the radio channel candidate and potentially interfering signals; and

means for calculating a dominant interference ratio being a ratio of a signal level of a strongest potentially interfering signal with respect to a sum of the signal levels of other potentially interfering signals; and

means for implementing a selection process for selecting a channel for a connection to be established using criteria based on the dominant interference ratio.

17. (New) An apparatus according to claim 16 wherein said means for implementing uses criteria based the carrier to interference ratio.

18. (New) An apparatus according to claim 17, further comprising means for applying an interference cancellation technique to the radio channel candidate and potentially interfering signals.

19. (New) An apparatus according to claim 18, further comprising means for using the dominant interference ratio to establish an indication as to a gain provided by the interference cancellation technique, the gain being used to establish a criteria for channel selection.

20. (New) An apparatus according to claim 16 for operating as part of a base station controller.

21. (New) A computer-readable medium having computer-executable components configured to perform a method comprising:

establishing a radio channel candidate;

processing the radio channel candidate with potentially interfering signals and calculating a carrier to interference ratio (CIR) for a selected carrier frequency of the radio channel candidate and the potentially interfering signals;

calculating a dominant interference ratio (DIR) being the ratio of a signal level of a strongest potentially interfering signal with respect to a sum of signal levels of other potentially interfering signals; and

using a criteria based on the dominant interference ratio in a channel selection process for selecting a channel for the connection to be established.

22. (New) A computer-readable medium according to claim 21 wherein said using criteria based on the dominant interference ratio additionally uses the carrier to interference ratio.

23. (New) A computer-readable medium according to claim 22, wherein the radio channel candidate and potentially interfering signals are processed using an interference cancellation technique.

24. (New) A computer-readable medium according to claim 23, wherein the dominant interference ratio is used to establish an indication as to an interference cancellation gain provided by the interference cancellation technique, the interference cancellation gain being used to establish a criteria for channel selection.

25. (New) A computer-readable medium according to claim 24, wherein the interference cancellation gain is used to modify an estimate of the carrier to interference ratio before using the carrier to interference ratio as a basis for criteria in the channel selection process.

26. (New) A computer-readable medium according to claim 21, wherein one of the criteria used in the channel selection process is a maximum value of a minimum difference between the calculated carrier to interference ratio and a target carrier to interference ratio.

27. (New) A computer-readable medium according to claim 21, where one of the criteria used in the selection process is an average dominant interference ratio taken over a set of n connections which could be interfered with by the connection to be established.

28. (New) A computer-readable medium according to claim 24, wherein the interference cancellation gain provided by the interference cancellation technique is established from the dominant interference ratio using a predefined function.